UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,742	02/19/2002	David Neil Slatter	30004064-2	4921

7590 04/05/2005

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER	
YE, LIN	

ART UNIT	PAPER NUMBER
2615	

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/078,742	SLATTER ET AL.	
	Examiner	Art Unit	
	Lin Ye	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 February 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/14/05, 10/15/02*, 2/14/02
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The Figures 1-2 are objected to under 37 CFR 1.84(o). Drawings submitted to the Office must be suitable descriptive legends may be used subject to approval by the Office, or may be required by the examiner where necessary for understanding of the drawing. They should contain as few words as possible.

   A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. Regarding claim 13, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

   A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6, 8-12 and 14-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Kweon U.S. Patent 6,667,771.

Referring to claim 1, the Kweon reference discloses in Figures 1-5, a wearable electromagnetic (EM) radiation (e.g., a wearable wireless image transmission system having a small-sized camera 4 and radio frequency transmission device 14, see Col. 3, lines 30-37) transmitter/receiver ("transmitter/receiver" is considered as transmitter **or** receiver) comprises a front portion and a rear portion, wherein the front portion includes transmission/reception section and is adapted to be worn outside a wearer's clothing (e.g., the RF transmission device 14, a clip 25, a body has a trough hole 27 for lens and image sensor 4 that mounted on the upper portion 23 are consider as the front portion, see Col.3, lines 45-50; those elements are worn outside a wearer's clothing as shown in Figure 5. It should be noted the reference number of "114" in Figure 5 actually means the RF transmission device 14, see Col. 4, lines 6-12), and wherein the rear portion includes a control section and is adapted to be worn inside at least part of the wearer's clothing (e.g., a partial of camera upper portion 23, lower portion 21 and a control circuit 6 that built in a camera circuit 50 are considered as the rear portion; and at least part of camera circuit 50 and upper portion 23 included inside of the wearer's pocket of a shirt as shown in Figures 4-5, see Col. 3, lines 31-33, lines 64-67 and Col. 4, lines 8-10), in which the front and rear portions are operable to communicate electrically with one another, and are physically connected to one another (the lower end of

the camera circuit 50 has a plurality conductor pins 53 as shown in Figure 3 to connect with transmission device 14 via cable 43, See Col. 4, lines 3-5).

Referring to claim 2, the Kweon reference discloses in which the front portion is secured to the rear portion (the clip 25 is secured on the camera upper portion 23 as shown in Figure 4, and the RF transmission device 14 are secured with lower end of the camera circuit 50 by cable 43 and jack 45, see Col. 4, lines 1-5).

Referring to claim 3, the Kweon reference discloses the front portion includes a radio transmitter (RF transmission device 14).

Referring to claim 4, the Kweon reference discloses in which the control section of the rear portion controls the transmission/reception section (e.g., a control circuit for video and audio signal 6 that built in a camera circuit 50 controls video and audio signals outputting to the transmission section 14, see Col. 3, lines 31-36, lines 64-67 and Col. 4, lines 8-10).

Referring to claim 5, the Kweon reference discloses in which the front portion includes image capture means (image sensor 4).

Referring to claim 6, the Kweon reference discloses in which the rear portion includes control means for the image capture means (a control circuit for video and audio signal 6 that built in a camera circuit 50 controls video and audio signals captured by image sensor 4, see Col. 3, lines 30-33).

Referring to claim 8, the Kweon reference discloses in which the front and rear portions are electrically connected by means of an electrically conducting connection pin (e.g., in Figure 3, the lower end of the camera circuit 50 has electrically conducting pins 53 as shown in Figure 3 to connect with transmission device 14 via cable 43; and each of the electrically

conducting pins 53 with each conducting line of cable 43 are considered as "electrically conducting connection pin" as claimed, see Col. 4, lines 3-5).

Referring to claim 9, the Kweon reference discloses in which the electrically conducting connection pin is arranged to extend through a wearer's clothing between the front and rear portions (e.g., the electrically conducting pin 53 connect with cable 43 to extend through a wearer's pocket of shirt between the lower end of the camera circuit 50 and the transmission section 14 as shown in Figures 3 and 5).

Referring to claim 10, the Kweon reference discloses in which the electrically conducting connection pin projects from the rear portion to be received in a corresponding opening in the front portion (e.g., the cable 43 projects from the transmission device 14 via jack 45 to be received in a corresponding opening in the low end of the camera circuit 50).

Referring to claim 11, the Kweon reference discloses in which the electrically conducting connection pin has multiple conduction paths (e.g., the camera circuit 50 has electrically conducting paths 53 to connect with a plurality of conducting lines of cable 43 as shown in Figure 3).

Referring to claim 12, the Kweon reference discloses which includes a plurality of electrically conducting connection pins arranged to connect the front and rear portions (e.g., the electrically conducting paths 53 connecting with a plurality of conducting lines of cable 43 are considered as "a plurality of electrically conducting connection pins" to connect the transmission device 14 and the low end of the camera circuit 50).

Referring to claim 14, the Kweon reference discloses in which the transmitter/receiver (a wearable wireless image transmission system) has a plurality of different front portions (e.g.,

the RF transmission device 14, a clip 25, a body has a trough hole 27 for lens and image sensor 4 that mounted on the upper portion 23 are consider as the plurality of different front portion, see Col.3, lines 45-50) all being differently shaped to blend with, or be suitable with, a wearer's clothing and all being operable to be used with the same rear portion as shown in Figure 5.

Referring to claim 15, the Kweon reference discloses in Figures 1-5, a wearable (e.g., a wearable wireless image transmission system having a small-sized camera 4 and radio frequency transmission device 14, see Col. 3, lines 30-37) transmitter/receiver ("transmitter/receiver" is considered as transmitter **or** receiver) comprises a front portion and a rear portion, wherein the rear portion is a control section (e.g., a partial of camera upper portion 23, lower portion 21 and a control circuit 6 that built in a camera circuit 50 are considered as the rear portion; and at least part of camera circuit 50 and upper portion 23 included inside of the wearer's pocket of a shirt as shown in Figures 4-5, see Col. 3, lines 31-33, lines 64-67 and Col. 4, lines 8-10) and the front portion is one of a plurality of interchangeable transmission/reception sections (e.g., the RF transmission device 14, a clip 25, a body has a trough hole 27 for lens and image sensor 4 that mounted on the upper portion 23 are consider as the front portion, see Col.3, lines 45-50) adapted to be secured to the rear portion and to communicate electrically therewith, wherein the front portion is disguised to suit a wearer's clothing (e.g., the clip 25 is secured on the camera upper portion 23 as shown in Figure 4, and the RF transmission device 14 are secured with lower end of the camera circuit 50 by cable 43 and jack 45, wherein the front portion is disguised to suit a wearer's pocket of shirt as a wearable pen, see Col. 4, lines 1-5).

Referring to claim 16, the Kweon reference discloses in which the front portion (the clip 5) is disguised to be less visible (as portion of the pen for photographing a particular location in secret is possible without exposure to others) against clothing (wearer's pocket).

Referring to claim 17, the Kweon reference discloses in which the front portion is disguised as a decorative feature (e.g., as a wearable pen appearance to decorate the wearer's pocket of a shirt).

Referring to claim 18, the Kweon reference discloses in Figures 1-5, a wearable electromagnetic (EM) radiation transmitter/receiver (e.g., a wearable wireless image transmission system having a small-sized camera 4 and radio frequency transmission device 14, see Col. 3, lines 30-37) comprises a front portion and a rear portion, wherein the front portion includes a transmission/reception section and is adapted to be worn outside a wearer's clothing (e.g., the RF transmission device 14, a clip 25, a body has a trough hole 27 for lens and image sensor 4 that mounted on the upper portion 23 are consider as the front portion, see Col.3, lines 45-50; those elements are worn outside a wearer's clothing as shown in Figure 5. It should be noted the reference number of "114" in Figure 5 actually means the RF transmission device 14, see Col. 4, lines 6-12), and wherein the rear portion includes a control section and is adapted to be worn inside at least part of the wearer's clothing (e.g., a partial of camera upper portion 23, lower portion 21 and a control circuit 6 that built in a camera circuit 50 are considered as the rear portion; and at least part of camera circuit 50 and upper portion 23 included inside of the wearer's pocket of a shirt as shown in Figures 4-5, see Col. 3, lines 31-33, lines 64-67 and Col. 4, lines 8-10), in which the front and rear portions are operable to communicate electrically with one another, and are physically

connected to one another, in which the front and rear portions are electrically connected by means of an electrically conducting connection pin (e.g., the lower end of the camera circuit 50 has electrically conducting pins 53 as shown in Figure 3 to connect with transmission device 14 via cable 43; and each of the electrically conducting pins 53 with each conducting line of cable 43 are considered as "electrically conducting connection pin" as claimed, see Col. 4, lines 3-5).

Referring to claim 19, the Kweon reference discloses in Figures 1-5, a wearable electromagnetic (EM) radiation transmitter/receiver (e.g., a wearable wireless image transmission system having a small-sized camera 4 and radio frequency transmission device 14, see Col. 3, lines 30-37) comprises a front portion and a rear portion, wherein the front portion includes a transmission/reception section and is adapted to be worn outside a wearer's clothing (e.g., the RF transmission device 14, a clip 25, a body has a trough hole 27 for lens and image sensor 4 that mounted on the upper portion 23 are consider as the front portion, see Col.3, lines 45-50; those elements are worn outside a wearer's clothing as shown in Figure 5. It should be noted the reference number of "114" in Figure 5 actually means the RF transmission device 14, see Col. 4, lines 6-12), and wherein the rear portion includes a control section and is adapted to be worn inside at least part of the wearer's clothing (e.g., a partial of camera upper portion 23, lower portion 21 and a control circuit 6 that built in a camera circuit 50 are considered as the rear portion; and at least part of camera circuit 50 and upper portion 23 included inside of the wearer's pocket of a shirt as shown in Figures 4-5, see Col. 3, lines 31-33, lines 64-67 and Col. 4, lines 8-10), in which the front and rear portions are operable to communicate electrically with one another, in which the front

portion is secured to the rear portion (the clip 25 is secured on the camera upper portion 23 as shown in Figure 4, and the RF transmission device 14 are secured with lower end of the camera circuit 50 by cable 43 and jack 45, see Col. 4, lines 1-5).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kweon U.S. Patent 6,667,771 in view of Ejima et al. U.S. Patent 2003/0156217.

Referring to claim 7, the Kweon reference discloses all subject matter as discussed with respected to claims 1 and 5, except that the Kweon reference does not explicitly show the rear portion also includes storage means for storage of captured images.

The Ejima reference teaches in Figures 4 and 8, a small sized camera can be inserted into a shirt pocket, with a front portion (the photographic finder, and light-emitting component) being positioned such that they protrude from the pocket, thus allowing photography of objects while the apparatus is inserted into a shirt pocket; and the rear portion inside of pocket including a control circuit (CPU 34) and memory (37 and 24) (See page 4, [0074]). The Ejima reference is evidence that one of ordinary skill in the art at the time to see more

advantages the camera has a storage means for storage of captured images so that desired the image data will not be lost and the image data can be saved for additional image processing late. For that reason, it would have been obvious to one of ordinary skill in the art to modify the system of Kweon ('771) by providing a storage means for storage of captured images in the rear portion as taught by Ejima ('217).

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kweon U.S. Patent 6,667,771.

Referring to claim 13, the Kweon reference discloses all subject matter as discussed with respected to claim 1, except the Kweon reference does not states the front portion is disguised as a piece of jewellery. Official Notice is taken that both the concept and the advantages of providing the front portion, which is a disguised as a piece of jewellery, are well known and expected in the art. It would have been obvious to modify the front portion of the wearable wireless image transmission system in Kweon ('771) that has a piece of jewellery appearance are known to fit with wearer's cloth so that photographing a particular location in secret is more possible without exposure to others.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Fraley et al. U.S 5,594,498 discloses a personal surveillance system having a video camera and an audio microphone in a signal package sufficiently small to be worn as a badge.

b. Jones et al. U.S. 6,292,213 discloses micro video cameras are sufficiently portable, miniature and weather-resistant for hands-free use.

c. Tsuboi et al. U.S. 5,610,678 discloses an apparatus adapted for use with a camera including a camera body and an independent optical viewfinder.

d. Haner U.S. 6,396,403 discloses a child monitoring system including a combination bracelet and camera transmitting assembly.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Ye whose telephone number is (571) 272-7372. The examiner can normally be reached on Mon-Fri 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lin Ye
Examiner
Art Unit 2615

January 19, 2005